Message

From: Davenport, Thomas [davenport.thomas@epa.gov]

Sent: 1/4/2016 1:51:12 PM

To: Hyde, Tinka [hyde.tinka@epa.gov]
CC: Henry, Timothy [henry.timothy@epa.gov]

Subject: Per Tim's direction. Status on Kewaunee County effort

Tinka:

The WDNR process is ongoing and its slightly ahead of schedule on all the items except the "Sensitive Areas and Practices" which is about 30 days behind schedule.

Two (Short Term Solutions and Compliance/Enforcement) of the four workgroups are in the process of finalizing documents to be used by the communications group. The "Sensitive Areas and Practices" Workgroup are still working through possible recommendations; their next meeting is January 21st (the Region will be represented). The "Communications" workgroup met for the first time on December 16th to define scope and next steps. The meeting notes should provide a general approach of how WDNR will be proceeding based upon the other work groups' products. The communications work group is exploring holding a public meeting to share the results of the effort to date and future plans with Kewaunee County residents. You and Tim will be invited to the meeting.

Only outstanding issue: WDNR would like a list for EPA employees that you want on the communications workgroup distribution list.

NRCS process is on track and their next Technical Advisory Group is scheduled for January 28th and the Region will be represented.

From: Henry, Timothy

Sent: Friday, January 01, 2016 5:43 PM

To: Davenport, Thomas <davenport.thomas@epa.gov>

Subject: FW: Utesch RE: Wisconsin's Third World Country: One-third of wells in Kewaunee County unsafe for drinking

water

Did Tinka ask you for an update? If not, looks like she will need one for Monday's 1100 meeting.

Tim Henry Deputy Director, Water Division U.S. EPA (W-15J)

77 W. Jackson Blvd., Chicago, IL 60604-3590 Phone: 312.886.6107 Fax: 312.692.2578

From: Hedman, Susan

Sent: Wednesday, December 23, 2015 7:11 PM

To: Hyde, Tinka <hyde.tinka@epa.gov>; Henry, Timothy <henry.timothy@epa.gov>

Subject: FW: Utesch RE: Wisconsin's Third World Country: One-third of wells in Kewaunee County unsafe for drinking

water

I will be asking for an update on our work with WDNR on this at our next senior staff meeting.

From: Ross, Laurie J - DNR [mailto:Laurie.Ross@wisconsin.gov]

Sent: Tuesday, December 22, 2015 7:52 AM **To:** Lynn Utesch < Inutesch@yahoo.com>

Cc: Dave Clausen < clausen delausendvm@gmail.com; Colvin, Alan R - GOV < Alan.Colvin@wisconsin.gov; Senator Dave Hansen

<sen.hansen@legis.wi.gov>; Mielke, Jon - LEGIS <Jon.Mielke@legis.wisconsin.gov>; Rep.Genrich - LEGIS

<Rep.Genrich@legis.wisconsin.gov>; Sen.Lassa - LEGIS <Sen.Lassa@legis.wisconsin.gov>; Senator Kathleen Vinehout

<sen.vinehout@legis.wi.gov>; Representative Chris Taylor <rep.taylor@legis.wi.gov>; Sen.Larson - LEGIS

<Sen.Larson@legis.wisconsin.gov>; Meyer, George <georgemeyer@tds.net>; Burdett, Cheryl

< <u>burdett.cheryl@epa.gov</u>>; Hyde, Tinka < <u>hyde.tinka@epa.gov</u>>; Burdett, Cheryl < <u>burdett.cheryl@epa.gov</u>>; Davenport, Thomas < davenport.thomas@epa.gov>; meraldo.dean@epa.gov; Hedman, Susan < hedman.susan@epa.gov>; Brancel,

Ben - DATCP <Ben.Brancel@wisconsin.gov>; Rhoades, Kitty - DHS <Kitty.Rhoades@dhs.wisconsin.gov>; Sen.Lasee - LEGIS

<Sen.Lasee@legis.wisconsin.gov>; Senator Luther Olsen <sen.olsen@legis.wi.gov>; Sen.Cowles - LEGIS

<Sen.Cowles@legis.wisconsin.gov>; rep.danou@legis.wi.gov; rep.kitchens@legis.wi.gov; Senator Mary Lazich

<sen.lazich@legis.wi.gov>; Garner Jennifer (Baldwin) <jennifer_garner@baldwin.senate.gov>; Sielaff Jessica (Baldwin)

 $< \underline{\mathsf{iessica_sielaff@baldwin.senate.gov}}; \ \mathsf{Helbick\ Mike\ (Baldwin)} < \underline{\mathsf{mike_helbick@baldwin.senate.gov}}; \ \mathsf{Representative}$

Reid Ribble <wi08rrima@mail.house.gov>; katherine.mize@mail.house.gov; Representative Peter Barca

<pbarca7@yahoo.com>; 18th District Representative Evan Goyke <rep.goyke@legis.wi.gov>; George Kraft

<wiswaterguy@gmail.com>

Subject: Utesch RE: Wisconsin's Third World Country: One-third of wells in Kewaunee County unsafe for drinking water

Thank you for your email was forwarded to the Natural Resources Board as well as to appropriate department staff for their consideration.

Best regards,

We are committed to service excellence.

Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Laurie J. Ross

Natural Resources Board Liaison – Office of the Secretary Wisconsin Department of Natural Resources P. O. Box 7921, Madison, WI 53707-7921

Phone: (608) 267-7420 Fax: (608) 266-6983

Email: laurie.ross@wisconsin.gov

dnr.wi.gov

From: Lynn Utesch [mailto:lnutesch@yahoo.com]
Sent: Tuesday, December 22, 2015 7:18 AM

To: Ross, Laurie J - DNR

Cc: Dave Clausen; Colvin, Alan R - GOV; Senator Dave Hansen; Mielke, Jon - LEGIS; Rep.Genrich - LEGIS; Sen.Lassa - LEGIS; Senator Kathleen Vinehout; Representative Chris Taylor; Sen.Larson - LEGIS; Meyer, George; Cheryl Burdett; Hyde, Tinka; burdett.cheryl@epamail.epa.gov; Davenport. Thomas; meraldo.dean@epa.gov; Susan Hedman; Brancel, Ben - DATCP; Rhoades, Kitty - DHS; Sen.Lasee - LEGIS; Senator Luther Olsen; Sen.Cowles - LEGIS; rep.kitchens@legis.wi.gov; Senator Mary Lazich; Garner Jennifer (Baldwin); Sielaff Jessica (Baldwin); Helbick Mike (Baldwin); Representative Reid Ribble; katherine.mize@mail.house.gov; Representative Peter Barca; 18th District Representative Evan Goyke; George Kraft

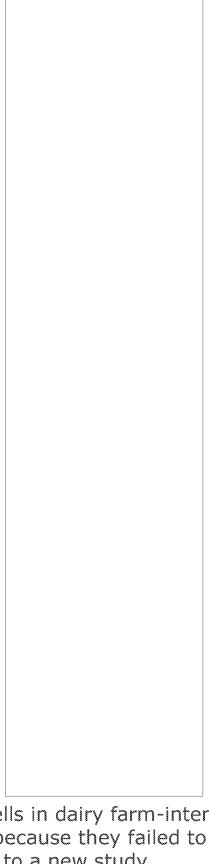
Subject: Wisconsin's Third World Country: One-third of wells in Kewaunee County unsafe for drinking water



Politics

One-third of wells in Kewaunee County unsafe for drinking water	
Submitted Deer Run Dairy LLC near the southern end of Sleepy Hollow Road in Kewaur County is among many large dairy farms in the county, where a recent stud found one-third of the wells exceeded safety standards for drinking water.	nee
By <u>Lee Bergquist</u> of the Journal Sentinel Dec. 21, 2015	
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More than one-third of wells in dairy farm-intensive Kewaunee County were found to be unsafe because they failed to meet health standards for drinking water, according to a new study.

Researchers say it's too early to blame cattle as the source of pollution.

But the findings are significant because the northeastern Wisconsin county — where cows far outnumber people — has become the center of a growing controversy in Wisconsin over manure's role in polluting ground and surface water.

The results are from the first phase of research funded by the Department of Natural Resources to study pollution problems. In Kewaunee County, cattle numbers have grown sharply over two decades, and the amount of manure exceeds the waste generated by the human population of Milwaukee.

Animal waste isn't cleaned by sewage treatment plants, however. Manure is spread on farmland as fertilizer and has long been an accepted practice of replenishing the soil for growing crops.

But manure use in Wisconsin has grown increasingly controversial, especially in areas with large-scale farms and where soil and local geologic conditions make groundwater more vulnerable to pollution. Kewaunee County has 15 large-scale dairy farms, known as CAFOs, or concentrated animal feeding operations, that have 700 or more milking cows per farm.

The county ranks among the highest in the number of CAFOs in the state, according to the DNR.

It also lies in a region where soil depth varies and sometimes is only a few feet above fractured bedrock where bacteria from manure and other pollutants can reach groundwater more easily.

Statewide, there are worries about the effect of manure and other nutrients that wash into streams, rivers and lakes and spur <u>algae</u> <u>blooms</u>. In Lake Michigan, animal waste, urban runoff and other sources are ingredients in the annual formation of a <u>dead zone</u> in Green Bay.

In October 2014, six environmental groups <u>petitioned the U.S.</u>
<u>Environmental Protection Agency</u> to use its authority to investigate water contamination. Kewaunee farmers opposed the petition, but the EPA responded by saying it would work with the DNR on groundwater issues in the county.

The DNR then brought together different parties this year for discussions and formed a series of work groups aimed at reducing the risk of groundwater contamination. Recommendations are expected to come out early next year.

The agency approved an \$80,000 research project, including the well study, that is led by researchers from the U.S. Agriculture Research Service and the University of Wisconsin-Oshkosh. The project will examine the extent and source of groundwater contamination in the county.

In August, Russ Rasmussen, the DNR's top water regulator, told the state Natural Resources Board the system of spreading manure in certain regions <u>isn't adequately protecting drinking water supplies</u>.

Last week, Rasmussen said the DNR will use input from the Kewaunee County work groups to recommend better application methods for sensitive areas. But he stressed the agency prefers a voluntary approach over regulations, which can take several years to implement.

"I do believe that those petitions made the DNR much more serious about the problem here," said Lee Luft, a member of the Kewaunee County Board and chairman of a newly formed county groundwater committee.

The initial well study showed that 34% of 320 wells tested in November — a relatively dry period — did not meet health standards for nitrates and total coliform, both of which can be found in manure but which can come from other sources as well.

Well testing in the county dating back to 2004 has produced similar results, although on average, the latest figures revealed a higher percentage of unsafe wells.

Between 2004 and 2015, 29% of 620 wells in a voluntary testing program by the Kewaunee County Land and Water Conservation Department showed unsafe drinking water.

The agriculture community has raised doubts about the results because owners of the wells volunteered to provide water samples and may have already suspected they had a problem or live near livestock operations or fractured bedrock.

The latest study is different.

"This was a random study and it was done countywide," said Mark A. Borchardt, a microbiologist for the U.S. Department of Agriculture, an expert on pathogens in groundwater and the co-investigator of the project.

Critics of past well reports have blamed leaking septic systems as a possible explanation for wells, but Luft cited county data showing by the end of August 79% of all septic systems had been inspected and were compliant or were coming into compliance.

With so much manure being spread on the landscape, Luft said the results are a sign that manure is the likely source of the tainted wells.

The county's <u>total cattle population</u> is 98,000, which includes dairy cows. That's up 64% from 59,800 cattle in 1983, <u>according to state</u> <u>figures</u>. The number of dairy cows, which produce more manure than calves or heifers, is 45,500, according to the <u>U.S. Agriculture</u> <u>Department</u>.

But Borchardt said, "It's way too premature" to blame cattle.

Borchardt and his colleagues still must pinpoint the various depths of contamination in the groundwater.

The next phase of the study will be more telling, he said. In that, researchers will use DNA fingerprinting to identify whether bacteria in 20 wells comes from cattle or humans. Another phase will use an automated sampling system to monitor the flow of groundwater in real time to measure spikes in bacteria and viruses moving through the groundwater.

In April, <u>Kewaunee County voters</u> approved a <u>groundwater protection</u> <u>ordinance</u> prohibiting manure spreading from Jan. 1 to April 15 on land with 20 feet or less of soil before reaching bedrock.

"It's a step in the right direction," said John Pagel, owner of <u>Pagel's</u> <u>Ponderosa Dairy</u>, the largest dairy farm in Kewaunee County. "It's one more tool for farmers to use."

The state-funded study will also inject more science into the manure debate, said Pagel, who milks more than 4,000 cattle.

"It's additional information to help us understand how serious the problem is," he said.

For now, he said, he wants to see the complete results from the study before he draws any conclusions.